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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,295	07/14/2003	Michael Lee	NKTZ 2 00061	6308
27885	7590	03/03/2006	EXAMINER	
FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			BLAU, STEPHEN LUTHER	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/619,295

Applicant(s)

LEE, MICHAEL

Examiner

Stephen L. Blau

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6,7,9,10,20-23 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6,7,9,10,20-23 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. The change to claim 26 is agreed with and the objection is removed

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6-7, 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elkins (D244,558) in view of Elkins (4,128,242) and Viollaz.

Elkins (D244,558) discloses head having a blade surface and a muscle back surface (Fig. 6), a muscle back surface having an upper ledge that generally follows the contour of the top edge (Figs. 1-2), a blade surface being near a top edge and substantially parallel to the front face (Figs. 1-2, and 6-7) and a muscle back portion covering at least half of the surface area of the rear surface (Fig. 1).

Elkins (D244,558) lacks a cavity disposed in a muscle back portion with the cavity not visible from the exterior of a club and having no visible cavity thereon, and a

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cavity vertically spaced from the sole. Elkins (4,128,242) discloses a head having a blade surface and a muscle back surface (Fig. 7), a cavity (53) disposed in a muscle back portion with a cavity (Figs. 7-8), a cavity vertically spaced from a sole (Fig. 7) and the cavity not visible from the exterior of a club in the form of being able to pour a filler into the cavity (53) and then placing a plug (55) over the cavity (Col. 12, Lns. 30-45) in order to have the moment of inertia about the center of gravity maximized by positioning weight at the heel and toe and in order to add effective loft to a head by having a center of gravity low (Col. 12, Lns. 19-67). In view of the patent of Elkins (4,128,242) it would have been obvious to modify the head of Elkins (D244,558) to have a cavity disposed in a muscle back portion with the cavity not visible from the exterior of a club and a cavity vertically spaced from the sole in order to have the moment of inertia about the center of gravity maximized by positioning weight at the heel and toe and in order to add effective loft to a head by having a center of gravity low.

Elkins (D244,558) has a lip at the back sole which one skilled in the art may define as forming a cavity on the back of the muscle back portion. Viollaz discloses a cavity not visible from an exterior of a club, a cavity vertically spaced from the sole (Figs. 4-5), a muscle back surface being rounded and having no visible cavity thereon (Figs. 2-3) and a cavity filled with a foamed urethane in the form of polyurethane (Col. 2, Lns. 46-50). In view of the patent of Viollaz it would have been obvious to modify the head of Elkins (D244,558) to have no lip where the muscle back surface intersection with the sole surface in order to have a more rounded intersection and as such have a head with less interaction with the ground when impacting the back of the sole with the

ground when impacting a ball on the ground. As such there would be a muscle back portion having no visible cavity thereon. In view of the patent of Viollaz it would have been obvious to modify the head of Elkins (D244,558) to have the cavity filled with foamed polyurethane in order to provide vibration dampening to a head at impact and in order to utilize a shock absorption material placed inside heads used in the market place.

4. Claims 9, 21-23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elkins (D244,558) in view of Elkins (4,128,242) and Viollaz as applied to claims 6-7, 10 and 20 above, and further in view of Motomiya.

Elkins (D244,558) lacks an elastomer filling a cavity. Motomiya discloses filling a sealed space with an elastic filler material such as foamed urethane and rubber (Col. 2, Lns. 14-16). In view of the patent of Motomiya it would have been obvious to modify the head of Elkins (D244,558) to have a polyurethane being a high rebound foamed elastomer filling a cavity in order to utilize a type of urethane shock absorption material used in the market place inserted in cavities of heads.

5. Claims 6-7, 10, 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elkins (D244,558) in view of Elkins (4,128,242) and Golden.

Elkins (D244,558) discloses head having a blade surface and a muscle back surface (Fig. 6), a muscle back surface having an upper ledge that generally follows the contour of the top edge (Figs. 1-2), a blade surface being near a top edge and

substantially parallel to the front face (Figs. 1-2, and 6-7) and a muscle back portion covering at least half of the surface area of the rear surface (Fig. 1).

Elkins (D244,558) lacks a cavity disposed in a muscle back portion with the cavity not visible from the exterior of a club and having no visible cavity thereon, and a cavity vertically spaced from the sole. Elkins (4,128,242) discloses a head having a blade surface and a muscle back surface (Fig. 7), a cavity (53) disposed in a muscle back portion with a cavity (Figs. 7-8), a cavity vertically spaced from a sole (Fig. 7) and the cavity not visible from the exterior of a club in the form of being able to pour a filler into the cavity (53) and then placing a plug (55) over the cavity (Col. 12, Lns. 30-45) in order to have the moment of inertia about the center of gravity maximized by positioning weight at the heel and toe and in order to add effective loft to a head by having a center of gravity low (Col. 12, Lns. 19-67). In view of the patent of Elkins (4,128,242) it would have been obvious to modify the head of Elkins (D244,558) to have a cavity disposed in a muscle back portion with the cavity not visible from the exterior of a club and a cavity vertically spaced from the sole in order to have the moment of inertia about the center of gravity maximized by positioning weight at the heel and toe and in order to add effective loft to a head by having a center of gravity low.

Elkins (D244,558) has a lip at the back sole which one skilled in the art may define as forming a cavity on the back of the muscle back portion. Golden discloses a head having a rear surface including a blade surface and a muscle back surface, a blade surface being near the top edge and substantially parallel to the front surface and a muscle back surface having a bottom interaction with the sole as being rounded (Figs.

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1-2). In view of the patent of Golden it would have been obvious to modify the head of Elkins (D244,558) to have no lip where the muscle back surface intersection with the sole surface in order to have less interaction with the ground when impacting the back of the sole with the ground when impacting a ball on the ground. As such there would be a muscle back portion having no visible cavity thereon.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 6-7, 9-10, 20-32 and 26 have been considered but are moot in view of the new ground(s) of rejection. Due to the new found reference of Elkins (4,128,242) and its use in the rejections this action is not made final.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen L. Blau whose telephone number is (571) 272-4406. The examiner can normally be reached on Mon - Fri 10:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eugene Kim can be reached on (571) 272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**STEPHEN BLAU**  
PRIMARY EXAMINER

Slb/22 February 2006